Teaching Tips for Developing Self-managing Learners

*The illiterate of the 21st century will not be those who cannot read and write but those who cannot learn, unlearn and relearn.* – Alvin Toffler (futurist and author of *Future Shock* and *The Third Wave*)*.*

To maintain ongoing employment success, our graduates have to prepare themselves to become self-managing learners that are able to

* analyse new conditions as they arise,
* identify the new knowledge and skills that they will be required to deal with these conditions,
* independently chart a course that responds to these changes, and
* think about their own cognitive processes: their thinking, reasoning, problem solving and learning. Self-managing learners are metacognitive.

Although everyone manages their own learning to some extent, people who are effective at leading major organisations are constant learners who actively use feedback systems to continuously improve and increase their capabilities (Covey, 2006).

Self-directed or independent learning can encompass a variety of situations and contexts where students are interpreting and scaffolding new knowledge and skills, including situations of group learning where activity may be collaborative. Independent learning is not about learning in ‘isolation’.

# Setting the foundations for independent learning

If our students are to become self-directed learners they need to develop awareness of learning as a process, as well as developing the skills of inquiry and critical evaluation (Candy, 1991). As a lecturer you can prepare your students by:

* talking to your students about their previous learning and teaching experiences;
* discussing their expectations of the course – how are they expecting to be taught, assessed and how do they expect to facilitate their own learning;
* talking about your expectations and the requirements of the course;
* reaching a shared understanding of these expectations;
* talking about independent learning in the context of communities of learners; and
* providing opportunities for developing study communities (through group work, study buddies, online discussion boards).

The transition for students into new ways of learning can be supported by providing plenty of opportunities for students to explore their learning with peers and teachers.

# Ongoing support

What else can you do to help your students become self-managing learners?

* Give an overview of the subject matter so that learners have a framework within which to build their knowledge.
* Recommend multi-media resources for independent study including texts, audio, internet and video.
* Remind students of the various support systems available to them especially a few weeks after induction when this useful information may have been forgotten.
* Find ways to connect with your students and their learning journey, perhaps relating aspects of your own ongoing journey. Whilst not necessarily directly affecting students’ skills in independent learning, the connections made between teachers and students in the classroom can motivate students to learn outside the classroom.
* Encourage and build confidence especially in the early stages by providing opportunities for students to bring questions and observations to class which have arisen from their independent reading.
* Encourage, and create opportunities for students to share, strategies that helped them learn a particular concept or process.
* Provide un-assessed opportunities to test out students’ independent learning with tasks set between classes.
* Create situations where students can control aspects of classroom learning such as selecting a reading for critical analysis for the next class.
* Gradually move over time from a role as teacher to that of a learning facilitator and teacher (Scharle & Szabó, 2000) as students become more confident independent learners.

# Tools for self-managed learning

Consider introducing your students to a range tools that could assist them to manage their learning and to improve their effectiveness as learners:

* E-portfolios (collections of multimedia including text, images, audio, blogs) can be assembled to demonstrate their learning over time (see Hill, 2009).
* Learning journals: students who analyse and reflect on their learning are more effective learners; that is, they are more able to acquire, retain, and apply new information and skills.
* Study skills sessions (goal setting, time management, working to deadlines, self-appraisal, reading).
* Ongoing support, both in the classroom and the library, to help students use strategic approaches to finding the information they need by defining the scope of their searches.

# Learning strategies instruction

Learning strategies are “specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective and more transferable to new situations” (Oxford, 1990, p. 8).

Learning strategies differ from learning styles/preferences in that they can more easily be adopted or dropped by learners (Brown, 2001).

The goal of learning strategies instruction is for students to become independent learners with the ability to use strategies aptly in a variety of contexts. Effective learners consciously employ a diverse range of strategies, whereas unsuccessful learners tend to use inefficient or ineffective strategies without realizing that those strategies are not producing acquisition (Anderson, 2005).

In the beginning, however, learning when and in what contexts to use particular strategies or groups of strategies requires direction and guidance from the teacher.

## A process for teaching learning strategies

***Preparation***

Develop student awareness of different strategies through small group retrospective interviews about tasks, modelling think-aloud then having students think aloud in small groups, discussion of interviews and think-alouds.

***Presentation***

Develop student knowledge about strategies by providing rationale for strategy use, describing and naming strategy, and modelling strategy.

***Practice***

Develop student skills in using strategies for academic learning through co-operative learning tasks, think-alouds while problem solving, peer tutoring in academic tasks, group discussions.

***Evaluation***

Develop student ability to evaluate own strategy use through writing strategiesused immediately after task, discussing strategy use in class, keeping dialogue journals (with teacher) on strategy use.

***Expansion***

Develop transfer of strategies to new tasks by discussions on metacognitive and motivational aspects of strategy use, additional practice on similar academic tasks, assignments to use learning strategies on tasks related to cultural backgrounds of students.’ (O’Malley & Chamot, 1990)

Competence in self-directed learning needs to be developed. Students need practice to learn how to be better learners. Therefore teaching should move gradually towards student self-regulation.

## Basic Types of Learning Strategies

Learning strategies can generally be classified into two broad groupings:

1. Direct cognitive strategies for specific learning tasks, such as memory strategies.
2. Meta-cognitive learning strategies such as those employed to manage the process of learning, including planning, evaluating, self-monitoring, motivational and affective (emotional) strategies.

### Direct task-based learning strategies

These strategies vary according to the learning task.

* Memory strategies help with storage and retrieval of information. These include strategies such as
	+ repetition;
	+ note-taking – writing down without processing;
* Cognitive strategies are used for manipulation of the learning material. These include strategies such as
	+ translation or interpretation – repeating in own words;
	+ note-taking – processing information to create personalised notes;
	+ deduction;
	+ contextualisation;
	+ inferencing;
	+ questioning for clarification.

### Meta-cognitive learning strategies

You can help students acquire meta-cognitive learning strategies by:

* encouraging them to focus on how to learn a particular concept or skill;
* asking them to articulate their thinking/learning so that the processes are made more explicit and visible in the classroom;
* encouraging them to support each others’ efforts to learn and jointly construct their learning
* assisting them to make connections and transfer their learning across contexts;
* ensuring the classroom environment is sensitive and constructive so that learners feel safe to make mistakes; and
* developing a reflective culture in your classroom where time taken to reflect on the process of learning is appreciated and valued.

It should be noted that meta-cognition (thinking about thinking) is at the heart of all learning; learners need to ‘unpack their thinking’ in order to appreciate the strategies they have used to learn, to assimilate the learning that has taken place and to link the learning to a new context.

The process of meta-cognition involves planning, doing (thinking/acting) and reflecting.

### Plan

You can assist your students during the planning stage by helping them to:

* activate prior knowledge, skills and understanding using tools such as [Concept maps](http://cmap.ihmc.us/publications/researchpapers/theorycmaps/theoryunderlyingconceptmaps.htm) or [KWL grids](http://www.science3-18.org/index.php?option=com_content&view=article&id=881&Itemid=2049);
* determine the thinking process/method and learning strategy using tools such as [Decision-making grids](http://www.mindtools.com/pages/article/newTED_03.htm); and
* determine success criteria using tools such as KWL grids or [Think-pair-share](http://serc.carleton.edu/introgeo/interactive/tpshare.html).

### Do

You can assist your students to do the thinking and learning by helping them to:

* think about cause and effect and making inferences using tools such as [Fishbone diagrams](http://www.mindtools.com/pages/article/newTMC_03.htm), KWL grids or [Odd One Out](http://www.thinkingclassroom.co.uk/MembersResources/TeachersToolbox/OddOneOut/LastWeeksOddOneOut.aspx);
* form opinions and make decisions using tools such as [Inference Ladders](http://www.mindtools.com/pages/article/newTMC_91.htm), [Diamond Ranking](http://teachingtechniques.boston.ac.uk/diamond_nine_and_ranking.html) or [Decision Trees](http://www.mindtools.com/dectree.html)
* think logically and seek patterns using tools such as an [Affinity Diagram](http://www.mindtools.com/pages/article/newTMC_86.htm)
* Consider evidence, information and ideas using tools such as [Jigsaw](http://www.jigsaw.org/) and [Venn Diagrams](http://homepage.usask.ca/~wiebeb/Venn2.html).

### Reflect

You can assist your students to reflect on their thinking and learning by helping them to:

* evaluate their own learning and thinking using tools such as [PMI diagrams](http://edgalaxy.com/thinking-tools/2012/9/6/pmi-chart-plus-minus-interesting-thinking-tool.html), Concept Maps, or Journals; and
* review outcomes and success criteria using tools such as PMI diagrams or Traffic Lighting (green for ‘great’, amber for ‘almost there’ and red for ‘re-think’.

Students’ beliefs about learning are formed by their previous educational experiences, so introducing new learning strategies that may challenge long-held beliefs will take time, practice and positive results before the strategy forms part of students’ learning toolkit.

# What else can you do?

By changing students’ educational experiences you can influence both their capacity and motivation to learn. Some ways you can do this are by:

* helping students to accept temporary discomfort and take risks to reap the rewards of new learning (to learn, unlearn and relearn). Discuss the fact that transformative learning often springs from initial discomfort and confusion, leading to a realisation that existing skills and knowledge are no longer adequate. Work at creating a safe environment for learning and valuing the questioning that arises from uncertainty and ambiguity.
* helping students to discuss how their feelings influence their learning, and share strategies about how to handle them. Discuss the value of perseverance when learning is difficult and knowing when and how to reward themselves to maintain motivation.
* ask questions that are worth answering! Good questions promote discussion, make students think, and have more than one answer (everyone can have an answer).
* increase wait-time. Most teachers wait for under one second before either modifying their question or answering it themselves. Allow time for students to think about questions and eventually you will develop a classroom culture in which everyone expects to think.
* review assessment tasks and learning activities to determine what types of thinking are required. Will students reflect throughout the task or only at the end? What thinking strategies do the learners already have or might they need for this task? What links can be made with prior knowledge, skills and understanding? When and how will students articulate and reflect on what they learned and how they learned it?
* work on improving the quality of student answers by
	+ asking follow-up questions such as ‘Why do you think that is?’, ‘Can you tell me more?’;
	+ telling students there’s not only one correct answer to the question;
	+ not evaluating answers – withholding judgement;
	+ asking another student to summarise an answer or add to an answer;
	+ asking students to view the issue from a different perspective;
	+ asking students to describe how they arrived at their answer; and
	+ deflecting student questions to the class rather than directly answering them.

# Conclusion

The above suggestions are not meant to be prescriptive. You may be implementing many of these already, some may need adaptation to your local context and others may be something you work towards in the medium to longer term. Whatever methods you choose or suggestions you adopt, supporting your students to become self-managing learners is a great way to encourage lifelong learning.

# References

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O’Malley, J. & Chamot, A. (1990). *Language Learning Strategies.* Cambridge: Cambridge University Press.